For Paul Schulwitz

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

115368 **SEARCH REQUEST FORM**

09/714,663

Requestor's Name: Sabiha Qazi Serial Number: 09/714,663

Date: 2/19/04 Phone: 20622 Art Unit: 1616

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

Please search for comps of for. (I) + composition in cl (II) which are N-substituted formamidine-sulphinic acids, the composition may further comprise other agents (see last part of cl 11.

Please see attached sheets

Elected sp: imino(phenylamino) methane sulphinic acid.

Thank you

STAFF USE ONLY

Date completed:
Searcher:
Terminal time: 2/24
Elapsed time: 2/26
CPU time: 70
Total time: 20'
Number of Searches:
Number of Databases:

Search Site
- STIC
- CM-1
- Pre-S

Type of Search
- N.A. Sequence
- A.A. Sequence
- Structure
- Bibliographic

Vendors
- IG Suite
- 3,5,46 STN
- Dialog
- APS
- Geninfo
- SDC
- DARC/Questel
- Other

PTO-1590 (9-90)
★ U.S. GPO: 1995-398-798/22489
USCOMM-DC 90-3952

Elected Species


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=> d que
L14            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "METHANESULFINIC ACID,
                  IMINO(PHENYLAMINO)-"/CN
L15           10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14


=> d l15 ibib ab hitstr 1-10

L15  ANSWER 1 OF 10  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2003:798402  HCAPLUS
DOCUMENT NUMBER:          139:311931
TITLE:                    Metal coating of hair fibers for cosmetics
INVENTOR(S):              Vic, Gabin; Livoreil, Aude; Giroud, Franck
PATENT ASSIGNEE(S):       L'oreal, Fr.
SOURCE:                   Fr. Demande, 18 pp.
                          CODEN: FRXXBL
DOCUMENT TYPE:            Patent
LANGUAGE:                 French
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     FR 2838050         A1   20031010       FR 2002-4352     20020408
     CN 1449737         A    20031022       CN 2003-108449   20030331
     EP 1352630         A2   20031015       EP 2003-290860   20030407
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 2003223944      A1   20031204       US 2003-407911   20030407
     JP 2003300840      A2   20031021       JP 2003-104420   20030408
PRIORITY APPLN. INFO.:                   FR 2002-4352     A  20020408
                                         US 2002-372455P  P  20020416
AB   The invention relates to a treatment process which confers cosmetic
     properties on hair fibers.  The process consists of treating the fibers
     with a metal salt in the presence of a reducing agent, directly on the
     fiber to form the corresponding free metal.  Thus, a lock of hair after
     being shampooed, was dried and an aq. soln. of AgNO3 was applied onto the
     hair.  After the addn. of NaBH4, the natural pigmented hair was dark, with
     metallic brilliance reflected on it.
IT   14451-43-5
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (metal treatment of hair fibers for cosmetics)
RN   14451-43-5  HCAPLUS
CN   Methanesulfinic acid, imino(phenylamino)- (9CI)  (CA INDEX NAME)
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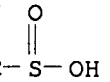

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REFERENCE COUNT:          10    THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15  ANSWER 2 OF 10  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2002:391481  HCAPLUS
```

DOCUMENT NUMBER: 136:390729
TITLE: Composition for the permanent deformation of the hair comprising at least one formamidinesulfinic acid derivative
INVENTOR(S): Garnier, Nathalie; Malle, Gerard; Samain, Henri
PATENT ASSIGNEE(S): L'Oreal SA, Fr.
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

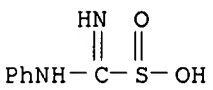
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002039965	A2	20020523	WO 2001-US43124	20011119
WO 2002039965	A3	20030320		
WO 2002039965	B1	20030710		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002033927	A5	20020527	AU 2002-33927	20011119
EP 1349534	A2	20031008	EP 2001-984923	20011119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 2000-714663 A 20001117
WO 2001-US43124 W 20011119
OTHER SOURCE(S): MARPAT 136:390729

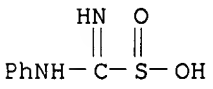
AB The invention relates to a reducing compn. for the permanent deformation of the hair comprising an N-substituted formamidine sulfinic acid deriv. as reducing agent and to a process for the permanent deformation of the hair employing this reducing compn. The compn. further comprises at least one additive chosen from reducing agents other than formamidine sulfinate, surface active agents, treating agents, fatty alcs., lanolin derivs., active ingredients, e.g., pantothenic acid, agents for combating hair loss, antidandruff agents, thickeners, suspending agents, sequestering agents, opacifying agents, colorants, sunscreens, fragrances, and preservatives. A kit comprises, in a first compartment, a reducing compn. and, in a second compartment, an oxidizing compn. For example, a lotion, contg. N-phenylformamidinesulfinic acid 0.5 M, as reducing agent, pentasodium diethylenetriaminepentaacetate 0.2 g, monoethanolamine as needed for pH 9, and water up to 100 g was prepd. The lotion was applied to natural hair forming curls using curlers and dried. The hair was rinsed with water, and a conventional setting compn. based on hydrogen peroxide was applied. Rinsing was again carried out and the curlers were removed. The lotion produced a much greater and more marked deformation in the shape of the hair compared with the lotion contg. formamidinesulfinic acid 0.5 M (in accordance with the prior art).

IT **14451-43-5**
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(compn. for permanent hair treatment comprising formamidine sulfinate

as reducing agent)
RN 14451-43-5 HCAPLUS
CN Methanesulfinic acid, imino(phenylamino)- (9CI) (CA INDEX NAME)

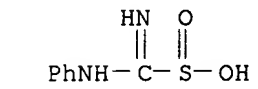


L15 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:99131 HCAPLUS
DOCUMENT NUMBER: 126:123897
TITLE: Voltammetric characteristics of sulfur-containing reducing agents
AUTHOR(S): Murav'ev, O. N.; Makarov, S. V.; Bazanov, M. I.; Budanov, V. V.
CORPORATE SOURCE: Ivanov. Gos. Khim.-Tekhnol. Akad., Ivanovo, Russia
SOURCE: Zhurnal Obshchei Khimii (1996), 66(9), 1416-1419
CODEN: ZOKHA4; ISSN: 0044-460X
PUBLISHER: Nauka
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The cyclic voltammetry method was used to confirm the similarity of the intermediates from the decompn. of Na dithionite, Na hydroxymethanesulfinate and dioxides of thiourea (thiourea dioxide and phenylthiourea dioxide). The redox potentials were detd. for electrode processes with the participation of intermediates (the ion radical SO2.- and the dithionite ion S2O42-). The cleavage of the C-S bond in dioxides of thiourea has a homolytic nature.
IT **14451-43-5**, Phenylthiourea dioxide
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(redox potential and cyclic voltammetric characteristics of)
RN 14451-43-5 HCAPLUS
CN Methanesulfinic acid, imino(phenylamino)- (9CI) (CA INDEX NAME)

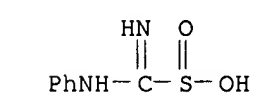


L15 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:444447 HCAPLUS
DOCUMENT NUMBER: 125:124925
TITLE: Acid-base properties of thio- and phenylthiourea dioxides
AUTHOR(S): Evdokimova, S. M.; Aleksandrova, A. N.; Makarov, S. V.; Budanov, V. V.
CORPORATE SOURCE: Ivanov. Gos. Khim.-Tekhnol. Akad., Ivanovo, Russia
SOURCE: Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya (1995), 38(6), 27-31
CODEN: IVUKAR; ISSN: 0579-2991
PUBLISHER: Ivanovskaya Gosudarstvennaya Khimiko-

Tekhnologicheskaya Akademiya
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The dissocn. consts. (pKa) of thio- and phenylthiourea dioxides were detd. in aq. solns. and in water-DMSO at different temps. and solvent compns.
IT **14451-43-5,** Phenylthiourea dioxide
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(acid-base equil. of thio- and phenylthiourea dioxides in aq. solns. and in water-DMSO)
RN 14451-43-5 HCAPLUS
CN Methanesulfinic acid, imino(phenylamino)- (9CI) (CA INDEX NAME)



L15 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:373817 HCAPLUS
DOCUMENT NUMBER: 122:329554
TITLE: Potentiometric determination of thiourea dioxides in water-organic media
AUTHOR(S): Evdokimova, S. M.; Aleksandrova, A. N.; Makarov, S. B.; Budanov, V. V.
CORPORATE SOURCE: Ivanovo Chem. Eng. Acad., Ivanovo, 153000, Russia
SOURCE: Journal of Analytical Chemistry (Translation of Zhurnal Analiticheskoi Khimii) (1995), 50(1), 69-71
CODEN: JACTE2; ISSN: 1061-9348
PUBLISHER: MAIK Nauka/Interperiodica
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The feasibility of detg. thiourea dioxide and its analogs by acid-base potentiometric titrn. in an water-DMSO medium was demonstrated. The relative std. deviation for 0.1M solns. was .ltoreq.0.69 relative %. For 0.01M and 0.001M solns., a relative std. deviation of 1.2 and 1.4 relative % was found, resp.
IT **14451-43-5,** Phenylthiourea dioxide
RL: ANT (Analyte); ANST (Analytical study)
(potentiometric detn. in water-org. media)
RN 14451-43-5 HCAPLUS
CN Methanesulfinic acid, imino(phenylamino)- (9CI) (CA INDEX NAME)



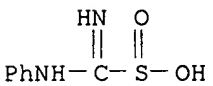
L15 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:58536 HCAPLUS
DOCUMENT NUMBER: 116:58536
TITLE: Stability and reactivity of methyl- and phenylthiourea dioxides in aqueous solution
AUTHOR(S): Lekhimena, K.; Makarov, S. V.; Budanov, V. V.

CORPORATE SOURCE: Ivanov. Khim.-Tekhnol. Inst., Ivanovo, USSR
SOURCE: Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya (1991), 34(8), 122-3
CODEN: IVUKAR; ISSN: 0579-2991
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The substituent dependence of stability and reducing activity of thiourea dioxides [i.e., stability increased in the series thiourea dioxide < phenylthiourea dioxide < methylthiourea dioxide, and reducing activity for Fe(edta)- in the opposite order] suggested that thiourea dioxide decompn. products were the active reducing species. The degree of ESR detection of SO2.bul.- was consistent with this reactivity order.

IT **14451-43-5**, Phenylthiourea dioxide
RL: PRP (Properties)
(stability of, and redn. with, of iron complex, kinetics of)

RN 14451-43-5 HCAPLUS
CN Methanesulfinic acid, imino(phenylamino)- (9CI) (CA INDEX NAME)

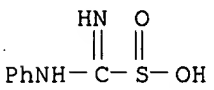


L15 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1988:422611 HCAPLUS
DOCUMENT NUMBER: 109:22611
TITLE: Chemistry of aminoiminomethanesulfinic and -sulfonic acids related to the toxicity of thioureas
AUTHOR(S): Miller, Audrey E.; Bischoff, Judith J.; Pae, Kathy
CORPORATE SOURCE: Dep. Chem., Univ. Connecticut, Storrs, CT, 06268, USA
SOURCE: Chemical Research in Toxicology (1988), 1(3), 169-74
CODEN: CRTOEC; ISSN: 0893-228X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The reactions of aminoiminomethanesulfonic acid, phenylaminoiminomethanesulfonic acid (I) and N,N'-diphenylaminoiminomethanesulfonic acid (II) in aq. media at pH 7.4, 10, and 13-14 were investigated. At neutral pH hydrolysis to the corresponding urea was the major pathway for all 3 compds. At higher pH I reacted to give phenylcyanamide in nearly quant. yield, whereas II gave diphenylcarbodiimide which reacted further to give N,N'-diphenylurea. At pH 10 aminoiminomethanesulfonic acid reacted with itself, eventually giving N-cyanoguanidine, whereas at pH 13-14, elimination to cyanamide predominated. The reactions of glycine with the aminoiminomethanesulfonic acids gave guanylated acetic acids as products. The rates of these nucleophilic substitutions of the sulfonic acid group of the aminoiminomethanesulfonic acids by the amino group of glycine decreased in the order aminoiminomethanesulfonic acid > phenylaminoiminomethanesulfonic acid > (2-methylphenyl)aminoiminomethanesulfonic acid > (2,6-dimethylphenyl)aminoiminomethanesulfonic acid. Higher relative rates of substitution of the aminoiminomethanesulfonic acids appear to be related to higher relative toxicities of the corresponding thioureas.

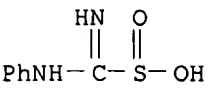
IT **14451-43-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reactions of, in aq. media)
RN 14451-43-5 HCAPLUS
CN Methanesulfinic acid, imino(phenylamino)- (9CI) (CA INDEX NAME)

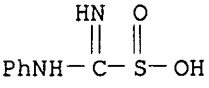


L15 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1980:17839 HCAPLUS
DOCUMENT NUMBER: 92:17839
TITLE: S-Oxygenation of N-substituted thioureas catalyzed by the pig liver microsomal FAD-containing monooxygenase
AUTHOR(S): Poulsen, L. L.; Hyslop, R. M.; Ziegler, D. M.
CORPORATE SOURCE: Dep. Chem., Univ. Texas, Austin, TX, 78712, USA
SOURCE: Archives of Biochemistry and Biophysics (1979), 198(1), 78-88
CODEN: ABBIA4; ISSN: 0003-9861
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The microsomal FAD-contg. monooxygenase (EC 1.14.13.8, dimethylaniline monooxygenase), purified to homogeneity from hog liver, catalyzed NADPH- and O-dependent S-oxygenation of phenylthiourea, ethylenethiourea, thiocarbanilide, N-methylthiourea, and thiourea to their corresponding formamidine sulfinic acids. The sulfinic acids are formed by sequential enzymic oxidn. of the thioureas through intermediate sulfenic acids. The reaction sequence was established by sepg. intermediate and final oxygenated metabolites of phenylthiourea and ethylenethiourea. The sulfenic and sulfinic acids of these 8 thioureas, produced enzymically, were chromatog. and spectrally identical with chem. synthesized ref. compds. Phenylformamidine and ethyleneformamidine sulfinic acids were slowly converted to their sulfonic acids on prolonged incubation. Whereas N-substituted formamidine sulfinic acids oxidize spontaneously to formamidine sulfonic acids at 37.degree., the further oxidn. of ethyleneformamidine sulfinic acid may be, at least in part, enzyme catalyzed. The purified monooxygenase also catalyzed rapid oxygenation of mercaptoimidazoles to the corresponding imidazole sulfinic acids. The instability of S-oxygenated mercaptoimidazoles prevented their isolation and pos. identification, but anal. of kinetic data obtained with sulfenic acid trapping agents suggested that these compds. are oxygenated by the same reaction sequence established for N-substituted thioureas. The NADPH- and O-dependent oxidn. of thiocarbamates and of 2-mercaptoimidazoles catalyzed by hog or hamster liver microsomes correlated with dimethylaniline N-oxidase activity and appeared completely independent from cytochrome P-450. The S-oxidn. of thiourea and its derivs. was not inhibited by n-octylamine, a known inhibitor of cytochrome P-450 dependent oxygenations. Furthermore, differential thermal inactivation of the flavin-contg. monooxygenase totally abolished phenylthiourea S-oxidase activity of hamster liver microsomes.
IT **14451-43-5**
RL: FORM (Formation, nonpreparative)
(formation of, by dimethylaniline monooxygenase reaction with phenylthiourea)
RN 14451-43-5 HCAPLUS

CN Methanesulfinic acid, imino(phenylamino)- (9CI) (CA INDEX NAME)



L15 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1970:434993 HCAPLUS
DOCUMENT NUMBER: 73:34993
TITLE: Synthesis and properties of some alkyl(aryl)-substituted formamidinesulfinic acids
AUTHOR(S): Yarovenko, E. Ya.; Lastovskii, R. P.
CORPORATE SOURCE: Vses. Nauch.-Issled. Inst. Khim. Reaktivov Osobo Chist. Khim. Veshch., Moscow, USSR
SOURCE: Zhurnal Organicheskoi Khimii (1970), 6(5), 947-9
CODEN: ZORKAE; ISSN: 0514-7492
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The oxidn. of RNHCSNHR1 with H2O2 in the presence of Na molybdate gave RNHC(:NR1)SO2H (I) (R and R1 given): H, CH2OH; H, Ph; H, o-HOC6H4; H, o-MeOC6H4; Ph, Ph. The potentiometric titrn. of I gave their approx. redox potentials. The presence of substituents in I lowers its ability as a reducing agent.
IT **14451-43-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 14451-43-5 HCAPLUS
CN Methanesulfinic acid, imino(phenylamino)- (9CI) (CA INDEX NAME)



L15 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1966:420406 HCAPLUS
DOCUMENT NUMBER: 65:20406
ORIGINAL REFERENCE NO.: 65:3751f-g
TITLE: N- or N,N'-aryl substituted formamidinesulfinic acids
INVENTOR(S): Globus, R. L.; Lastovskii, R. P.; Yarovenko, E. Ya.; Medvedeva, S. P.
PATENT ASSIGNEE(S): All-Union Scientific-Research Institute of Chemical Reagents and Pure Chemical Substances
SOURCE From: Izobret., Prom. Obraztsy, Tovarnye Znaki 43(4), 17(1966)..
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

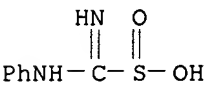
SU 178803 19660203 SU 19650120

AB The title compds. are prepd. by treating N- or N,N'-aryl substituted thiourea with H2O2 at 0-15.degree. in the presence of Na2MoO4 in a solvent medium. Subsequently, the product is sepd. by filtration.

IT **14451-43-5**, Methanesulfinic acid, anilinoimino-
(prepn. of)

RN 14451-43-5 HCAPLUS

CN Methanesulfinic acid, imino(phenylamino)- (9CI) (CA INDEX NAME)



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L1              STR

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N~~C~~S~~O
1   2   3   4

NODE ATTRIBUTES:
CONNECT IS E3  RC AT   3
CONNECT IS E1  RC AT   4
CONNECT IS E1  RC AT   6
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   6

STEREO ATTRIBUTES: NONE
L2            72 SEA FILE=REGISTRY SSS FUL L1
L14            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "METHANESULFINIC ACID,
                 IMINO(PHENYLAMINO)-"/CN
L15           10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14
L19           71 SEA FILE=REGISTRY ABB=ON  PLU=ON  L2 NOT 1758-73-2
L20           41 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19
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=> d l21 ibib ab hitstr 1-31

L21  ANSWER 1 OF 31  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2002:283159  HCAPLUS
DOCUMENT NUMBER:          137:154988
TITLE:                    N,N'-bis(3-triethylsilylpropyl)thiourea S-dioxide and
                          poly[N,N'-bis(silsesquioxanylpropyl)thiourea
                          S-dioxide] as reductants
AUTHOR(S):                Vlasova, N. N.; Raspopina, O. Yu.; Pozhidaev, Yu. N.;
                          Voronkov, M. G.
CORPORATE SOURCE:         Favorskii Irkutsk Institute of Chemistry, Siberian
                          Division, Russian Academy of Sciences, Irkutsk, Russia
SOURCE:                   Russian Journal of General Chemistry (Translation of
                          Zhurnal Obshchei Khimii) (2002), 72(1), 55-57
                          CODEN: RJGCEK; ISSN: 1070-3632
PUBLISHER:                MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
OTHER SOURCE(S):          CASREACT 137:154988
AB   The reducing power of organosilicon thiourea S,S-dioxides,
     N,N'-bis[3-(triethylsilylpropyl)]thiourea S,S-dioxide and
     poly[N,N'-bis(silsesquioxanylpropyl)thiourea S,S-dioxide], was studied.
     The 1st, the monomeric dioxide, readily reduced cyclohexanone to
     cyclohexanol.  In its presence, under phase-transfer conditions, di-Pr
     disulfide reacted with bromobenzene to form Pr Ph sulfide, and Te reacted
     with Et bromide to form di-Et telluride.  The reducing power of the
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polymeric dioxide was demonstrated by the example of redn. of KMnO4 to MnO2. Irresp. of the medium (neutral, acidic, or alk.), this polymer reduced Mn(VII) to Mn(IV).

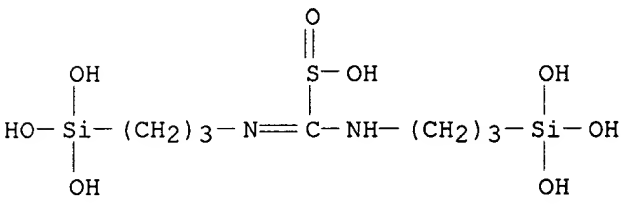
IT **409105-75-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reducing power of)

RN 409105-75-5 HCAPLUS

CN 5,7-Diaza-1,11-disilaundec-5-ene-6-sulfinic acid, 1,1,1,11,11,11-hexahydroxy-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 409105-74-4
CMF C7 H20 N2 O8 S Si2



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

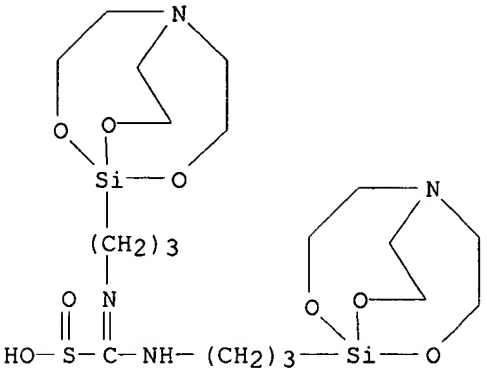
L21 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:261657 HCAPLUS
DOCUMENT NUMBER: 137:169569
TITLE: Bis-N,N'-(3-silatranylpropyl)-S-dioxythiocarbamide
AUTHOR(S): Vlasova, N. N.; Grigor'eva, O. Yu.; Voronkov, M. G.
CORPORATE SOURCE: Favorskii Irkutsk Institute of Chemistry, Siberian Division, Russian Academy of Sciences, Irkutsk, Russia
SOURCE: Russian Journal of General Chemistry (Translation of Zhurnal Obshchei Khimii) (2001), 71(12), 1950-1951
CODEN: RJGCEK; ISSN: 1070-3632
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:169569

AB Oxidn. reaction of N,N-bis(3-silatranylpropyl)thiocarbamide [R(CH2)3NHC(S)NH(CH2)3R, R = Si(OCH2CH2)3N] in CHCl3 with 45-50% H2O2 at 0-5.degree. gave R(CH2)3NHC(SO2)NH(CH2)3R in 60% yield.

IT **448950-39-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 448950-39-8 HCAPLUS

CN Methanesulfinic acid, [[3-(2,8,9-trioxa-5-aza-1-silabicyclo[3.3.3]undec-1-yl)propyl]amino][[3-(2,8,9-trioxa-5-aza-1-silabicyclo[3.3.3]undec-1-yl)propyl]imino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:30509 HCAPLUS
DOCUMENT NUMBER: 136:303183
TITLE: Vanadium(V) sorption by organosilicon polymers
AUTHOR(S): Kirillov, A. I.; Panezhda, E. V.; Vlasova, N. N.; Pozhidaev, Yu. N.; Minchenko, O. A.; Belousova, L. I.; Voronkov, M. G.
CORPORATE SOURCE: Irkutsk State University, Irkutsk, Russia
SOURCE: Russian Journal of Applied Chemistry (Translation of Zhurnal Prikladnoi Khimii) (2001), 74(6), 950-953
CODEN: RJACEO; ISSN: 1070-4272
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English

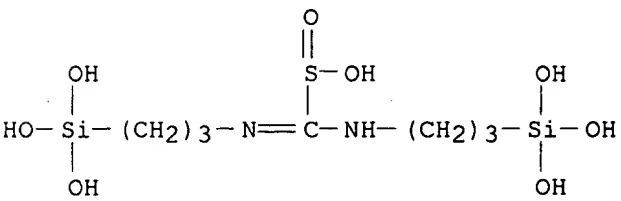
AB Features of V(V) sorption by cross-linked organosilicon polymers - polyorganylsilsesquioxanes contg. acetamide, phthalamide, malondiamide, and thiourea dioxide functional substituents, were studied.

IT **409105-75-5**
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(vanadium(V) sorption by organosilicon polymers for concn. and photometric detn. of vanadium)

RN 409105-75-5 HCAPLUS
CN 5,7-Diaza-1,11-disilaundec-5-ene-6-sulfinic acid, 1,1,1,11,11,11-hexahydroxy-, homopolymer (9CI) (CA INDEX NAME)

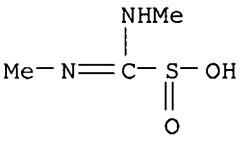
CM 1

CRN 409105-74-4
CMF C7 H20 N2 O8 S Si2

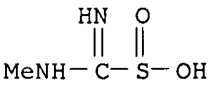


REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:475176 HCAPLUS
DOCUMENT NUMBER: 135:210721
TITLE: Thiourea oxide structure from AM1 method data
AUTHOR(S): Davtyan, K. A.; Makarov, S. V.; Kudrik, E. V.
CORPORATE SOURCE: Ivanov. Gos. Khim.-Tekhnol. Univ., Ivanovo, Russia
SOURCE: Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya (2001), 44(2), 22-24
CODEN: IVUKAR; ISSN: 0579-2991
PUBLISHER: Ivanovskii Gosudarstvennyi Khimiko-Tekhnologicheskii Universitet
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Electronic and geometric structure of thiourea oxides (TOTU), N-Me and N,N-di-Me thiourea dioxides were studied by semiempiric quantum-chem. AM1 method. Considered is the effect of the solvent on TOTU structure when a reacting mol. is approaching.
IT **55152-72-2 108249-21-4**
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(thiourea oxide structure from AM1 method data)
RN 55152-72-2 HCAPLUS
CN Methanesulfinic acid, (methylamino)(methylimino)- (9CI) (CA INDEX NAME)

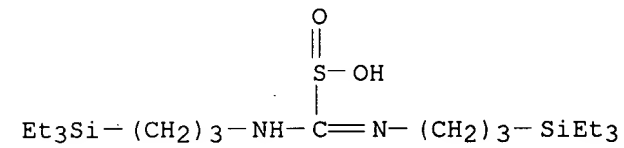


RN 108249-21-4 HCAPLUS
CN Methanesulfinic acid, imino(methylamino)- (6CI, 9CI) (CA INDEX NAME)



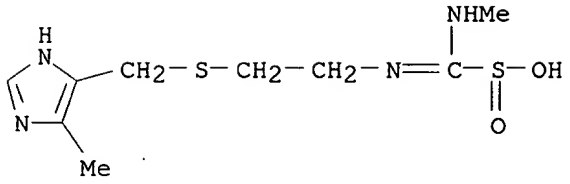
L21 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:317276 HCAPLUS
DOCUMENT NUMBER: 135:76930
TITLE: Bis-N,N'-(3-triethylsilylpropyl)thiourea dioxide
AUTHOR(S): Vlasova, N. N.; Raspopina, O. Yu.; Kashik, T. V.; Voronkov, M. G.
CORPORATE SOURCE: Irkutsk Institute of Chemistry, Siberian Division, Russian Academy of Sciences, Irkutsk, Russia
SOURCE: Russian Journal of General Chemistry (Translation of Zhurnal Obshchei Khimii) (2000), 70(10), 1651
CODEN: RJGCEK; ISSN: 1070-3632
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal

LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:76930
AB The title compd. was synthesized by oxidn. of N,N'-(3-triethylsilylpropyl)thiourea with 50% hydrogen peroxide in dioxane and was characterized by elemental anal. and IR spectra. Nonaq. potentiometric titrn. showed that the product is a very week acid in methanol and acetonitrile (pKa = 13.8, 23.84).
IT **347193-65-1P**
RL: BYP (Byproduct); PREP (Preparation)
(formation during synthesis of (silylpropyl)thiourea dioxide)
RN 347193-65-1 HCAPLUS
CN 7,9-Diaza-3,13-disilapentadec-7-ene-8-sulfinic acid, 3,3,13,13-tetraethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:257321 HCAPLUS
DOCUMENT NUMBER: 133:171764
TITLE: Topological potential of zwitterion analogues of cimetidine as H2 receptor antagonists
AUTHOR(S): Agrawal, Vijay K.; Sachan, Shailja; Khadikar, Padmakar V.
CORPORATE SOURCE: Department of Chemistry, APS University, Rewa, 486 003, India
SOURCE: Polish Journal of Pharmacology (2000), 52(1), 39-46
CODEN: PJPAE3; ISSN: 1230-6002
PUBLISHER: Polish Academy of Sciences, Institute of Pharmacology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Topol. potential of zwitterionic analogs of cimetidine as H2 receptor antagonists were investigated using a no. of topol. indexes viz. mol. redundancy index (MRI), 1st order mol. connectivity index (1.chi.v), and rooted Wiener (Ww) and rooted Szeged (Szw) indexes. The multiple regression anal. have indicated that the H2 receptor antagonist activities (-logKB) can be modelled using indicator parameters. Most results were obtained when MRI was coupled with Ww as well as the indicator parameters (Ip1 and Ip2).
IT **108082-64-0**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topol. potential of zwitterion analogs of cimetidine as H2 receptor antagonists)
RN 108082-64-0 HCAPLUS
CN Methanesulfinic acid, (methylamino)[[2-[[(5-methyl-1H-imidazol-4-yl)methyl]thio]ethyl]imino]- (9CI) (CA INDEX NAME)



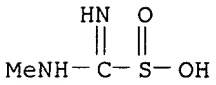
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:141106 HCAPLUS
DOCUMENT NUMBER: 132:303459
TITLE: Evidence for the Involvement of N-Methylthiourea, a Ring Cleavage Metabolite, in the Hepatotoxicity of Methimazole in Glutathione-Depleted Mice: Structure-Toxicity and Metabolic Studies
AUTHOR(S): Mizutani, Tamio; Yoshida, Kaoru; Murakami, Mihoko; Shirai, Mutsuko; Kawazoe, Sadahiro
CORPORATE SOURCE: Department of Food Sciences and Nutritional Health, Kyoto Prefectural University, Shimogamo, Kyoto, 606-8522, Japan
SOURCE: Chemical Research in Toxicology (2000), 13(3), 170-176
CODEN: CRTOEC; ISSN: 0893-228X
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In mice depleted of GSH by treatment with buthionine sulfoximine (BSO), methimazole (2-mercapto-1-methylimidazole, MMI) causes liver injury characterized by centrilobular necrosis of hepatocytes and an increase in serum alanine transaminase (SALT) activity. MMI requires metabolic activation by both P 450 monooxygenase and flavin-contg. monooxygenase (FMO) before it produces the hepatotoxicity. MMI and its analogs were examd. for the ability to increase SALT activity in GSH-depleted mice. Satn. of the C-4,5 double bond in MMI resulted in a complete loss of hepatotoxicity. Similarly, ring fusion of a benzene nucleus to the C-4,5 double bond, forming 2-mercapto-1-methylbenzimidazole, abolished the toxic potency. As for MMI, 2-mercapto-1,4,5-trimethylimidazole, and 2-mercapto-1-methyl-4,5-di-n-propylimidazole, the toxic potency decreased with the increasing bulk of the 4- and 5-alkyl substituents. Furthermore, methylation of the thiol group of MMI totally reduced its toxicity. These structural requirements and the known toxicity of thiono-sulfur compds. led us to the hypothesis that MMI would undergo epoxidn. of the C-4,5 double bond by P 450 enzymes and, after being hydrolyzed, the resulting epoxide would be then decompd. to form N-methylthiourea, a proximate toxicant. Before N-methylthiourea would produce toxicity, it would be further biotransformed to its S-oxidized metabolites mainly by FMO. Evidence for this hypothesis was provided by the facts that N-methylthiourea and glyoxal as the accompanying fragment were identified as urinary metabolites in mice treated with MMI and that N-methylthiourea caused a marked increase in SALT activity when administered to mice in combination with BSO.

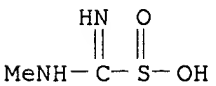
IT **108249-21-4**
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(methimazole analogs hepatotoxicity in glutathione depletion:

structure-toxicity and metab.)
RN 108249-21-4 HCAPLUS
CN Methanesulfinic acid, imino(methylamino)- (6CI, 9CI) (CA INDEX NAME)

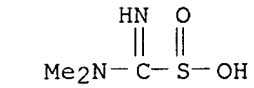


REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:106083 HCAPLUS
DOCUMENT NUMBER: 132:278843
TITLE: Reactive oxygen species in aerobic decomposition of thiourea dioxides
AUTHOR(S): Svarovsky, Serge A.; Simoyi, Reuben H.; Makarov, Sergei V.
CORPORATE SOURCE: Department of Chemistry, West Virginia University, Morgantown, WV, 26506-6045, USA
SOURCE: Dalton (2000), (4), 511-514
CODEN: DALTFG
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Thiourea dioxides decomp. in air-satd. alk. solns. to give dithionite, S2O42-. Kinetics of decompn. of aminoiminomethanesulfinic acid (AIMSA), methylaminoiminomethanesulfinic acid (MAIMSA) and dimethylaminoiminomethanesulfinic acid (DMAIMSA) were studied in alk. solns. under aerobic and anaerobic conditions. No dithionite was formed in strictly anaerobic conditions. Dithionite, however, was formed in the presence of KO2 and H2O2 under anaerobic conditions. The rate of decompn. was fastest for DMAIMSA and slowest for MAIMSA. The proposed mechanism involves the initial formation of the dioxosulfate(2-) ion, SO22-, through the heterolytic cleavage of the C-S bond. The dioxosulfate(2-) ion then reacts with dioxygen to give reactive O species: superoxide, peroxide and the hydroxyl radical. The expected dismutation of superoxide is important only in weakly alk. solns. of pH <10. It is suggested, for the 1st time, that the reactive O species and the S leaving groups may be responsible for the toxicity obsd. in most thioureas.
IT **108249-21-4**
RL: ADV (Adverse effect, including toxicity); FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent)
(reactive oxygen species in aerobic decompn. of thiourea dioxides)
RN 108249-21-4 HCAPLUS
CN Methanesulfinic acid, imino(methylamino)- (6CI, 9CI) (CA INDEX NAME)



IT **263894-01-5**
RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)
(reactive oxygen species in aerobic decompn. of thiourea dioxides)
RN 263894-01-5 HCAPLUS
CN Methanesulfinic acid, (dimethylamino)imino- (9CI) (CA INDEX NAME)

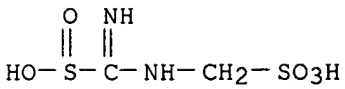


REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

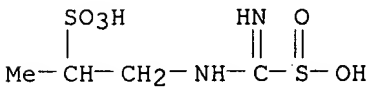
L21 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:613150 HCAPLUS
DOCUMENT NUMBER: 123:127467
TITLE: Silver halide emulsion, its manufacture, and photographic material containing it
INVENTOR(S): Fujimori, Tooru; Kojima, Tetsuo; Morimura, Kimyasu
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07092591	A2	19950407	JP 1993-239662	19930927

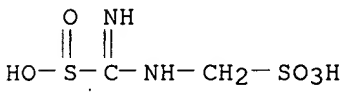
PRIORITY APPLN. INFO.: JP 1993-239662 19930927
OTHER SOURCE(S): MARPAT 123:127467
AB The Ag halide emulsion is manufd. in the presence of thiourea dioxide deriv. (MO)(O:)SC(NR2R3)(:NR1) (R1-3 = alkyl, alkenyl, aralkyl, aryl, heterocyclic group, H; .gtoreq.1 R1-2 = sulfonic acid group, its salt group, phosphoric acid group, its salt group, .gtoreq.1-amino-substituted alkyl, alkenyl, aralkyl, aryl, heterocyclic group; M = H, cationic group). The obtained emulsion is also claimed. The material contains the emulsion. The material showed high sensitivity and low fog.
IT **166307-04-6 166307-05-7 166307-06-8**
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(silver halide emulsion contg. thiourea dioxide deriv. redn. sensitizer, its manuf., and photog. material with good storage stability)
RN 166307-04-6 HCAPLUS
CN Methanesulfonic acid, [(iminosulfinomethyl)amino]-, monosodium salt (9CI) (CA INDEX NAME)



RN 166307-05-7 HCAPLUS
CN 2-Propanesulfonic acid, 1-[(iminosulfinomethyl)amino]- (9CI) (CA INDEX NAME)



RN 166307-06-8 HCAPLUS
CN Methanesulfonic acid, [(iminosulfinomethyl)amino]-, dipotassium salt (9CI) (CA INDEX NAME)

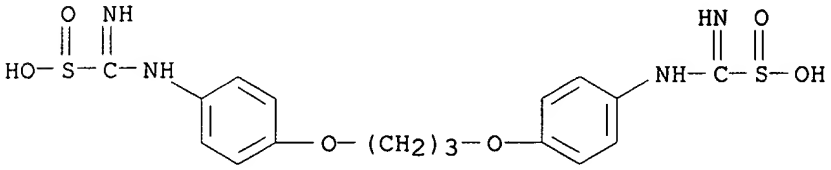


L21 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:212577 HCAPLUS
DOCUMENT NUMBER: 118:212577
TITLE: Biological properties of amidinium sulfinic and sulfonic acid derivatives: inhibition of glycolytic enzymes of Trypanosoma brucei and protective effect on cell growth
AUTHOR(S): Willson, M.; Perie, J. J.; Malecaze, F.; Opperdoes, F.; Callens, M.
CORPORATE SOURCE: Groupe Chim. Org. Biol., Univ. Paul-Sabatier, Toulouse, 31062, Fr.
SOURCE: European Journal of Medicinal Chemistry (1992), 27(8), 799-808
CODEN: EJMCA5; ISSN: 0223-5234
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The activity of the title compds., e.g., 4-HOC6H4NHC+(NH2)SOn- and (4-PhCH2C6H4NH)2C+SOn- (n = 2, 3), prepd. from thioureas, such as 4-HOC6H4NHCSNH2, was investigated on two biol. systems: cultures of trypanosome via glycolytic enzyme inhibition, and on retinal epithelium cells. In both cases, these compds. exhibit a significant activity, in some cases more selective than that of the drug suramin, with a lower toxicity. The effect of these compds., which exist as neutral and

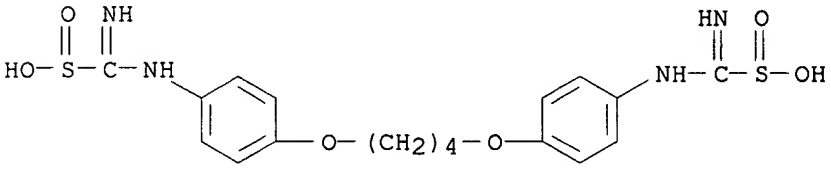
zwitterionic forms in the case of sulfinic derivs. and only as zwitterionic in the case of sulfonic derivs., can be understood via their action on clusters of pos. charges which are present at the surface of the proteins involved in the processes: glycolytic enzymes of the trypanosome in the first part and basic fibroblast growth factor in the second.

IT **146886-02-4P 146886-03-5P 146886-05-7P 147218-61-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and protozoacidal activity of)

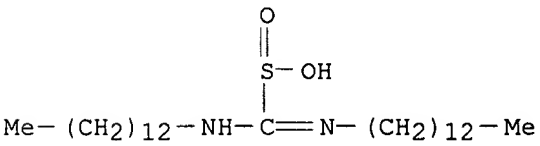
RN 146886-02-4 HCAPLUS
CN Methanesulfinic acid, [1,3-propanediylbis(oxy-4,1-phenyleneimino)]bis[imino- (9CI) (CA INDEX NAME)



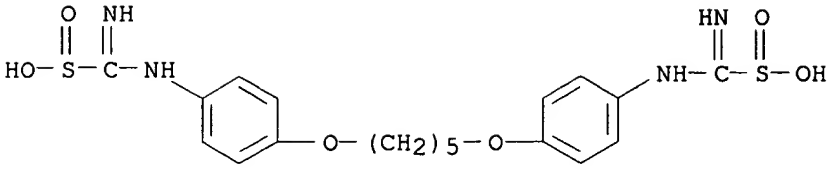
RN 146886-03-5 HCAPLUS
CN Methanesulfinic acid, [1,4-butanediylbis(oxy-4,1-phenyleneimino)]bis[imino- (9CI) (CA INDEX NAME)



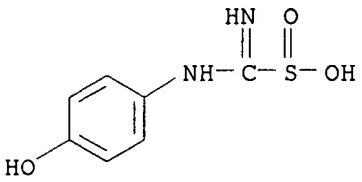
RN 146886-05-7 HCAPLUS
CN Methanesulfinic acid, (tridecylamino)(tridecylimino)- (9CI) (CA INDEX NAME)



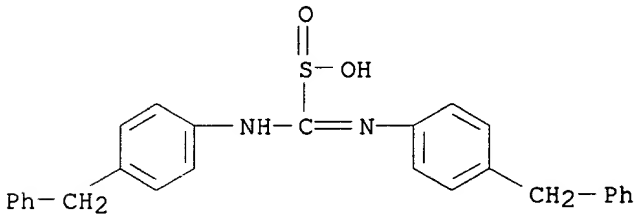
RN 147218-61-9 HCAPLUS
CN Methanesulfinic acid, [1,5-pentanediylbis(oxy-4,1-phenyleneimino)]bis[imino- (9CI) (CA INDEX NAME)



IT **146886-04-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., cell growth-inhibiting, and protozoacidal activity of)
RN 146886-04-6 HCAPLUS
CN Methanesulfinic acid, [(4-hydroxyphenyl)amino]imino- (9CI) (CA INDEX NAME)



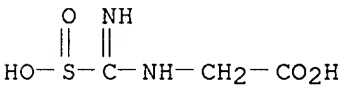
IT **146886-06-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., oxidn., protozoacidal and glycolytic enzyme-inhibiting activity of)
RN 146886-06-8 HCAPLUS
CN Methanesulfinic acid, [[4-(phenylmethyl)phenyl]amino][[4-(phenylmethyl)phenyl]imino]- (9CI) (CA INDEX NAME)



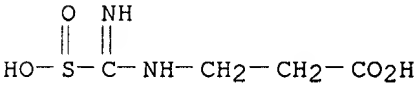
L21 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:530819 HCAPLUS
DOCUMENT NUMBER: 117:130819
TITLE: Preparation of N-(carboxyalkyl)thiourea dioxide salts as water-soluble reducing agents
INVENTOR(S): Nitoh, Hirohisa; Ohura, Osami; Suzuki, Morio
PATENT ASSIGNEE(S): Tokai Denka Kogyo Kabushiki Kaisha, Japan
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 488749	A1	19920603	EP 1991-311047	19911128
EP 488749	B1	19960131		
R: DE, ES, FR, GB				
JP 04198163	A2	19920717	JP 1990-325432	19901129
JP 2808489	B2	19981008		
US 5149871	A	19920922	US 1991-797789	19911125
CA 2056548	AA	19920530	CA 1991-2056548	19911128
ES 2082159	T3	19960316	ES 1991-311047	19911128

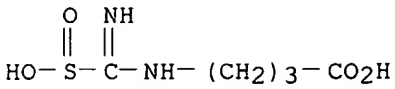
PRIORITY APPLN. INFO.: JP 1990-325432 19901129
OTHER SOURCE(S): MARPAT 117:130819
AB -O2SC+(NH2)NH(CH2)nCO2M (I; M = Na, K, 0.5 Ca; n = 1-7) were prepd. Thus, thiourea dioxide was stirred 4 h with glycine in H2O contg. NaOAc to give I (M = Na, n = 1) and NH4OAc.
IT **143301-41-1P 143301-42-2P 143301-43-3P**
143301-44-4P 143301-45-5P 143301-46-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as water-sol. reducing agent)
RN 143301-41-1 HCAPLUS
CN Glycine, N-(iminosulfinomethyl)-, monosodium salt (9CI) (CA INDEX NAME)



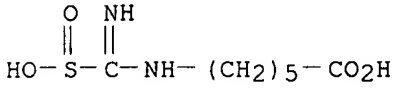
RN 143301-42-2 HCAPLUS
CN .beta.-Alanine, N-(iminosulfinomethyl)-, monosodium salt (9CI) (CA INDEX NAME)



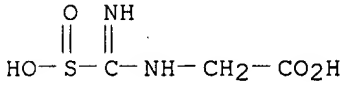
RN 143301-43-3 HCAPLUS
CN Butanoic acid, 4-[(iminosulfinomethyl)amino]-, monosodium salt (9CI) (CA INDEX NAME)



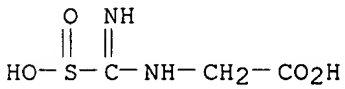
RN 143301-44-4 HCAPLUS
CN Hexanoic acid, 6-[(iminosulfinomethyl)amino]-, monosodium salt (9CI) (CA INDEX NAME)



RN 143301-45-5 HCAPLUS
CN Glycine, N-(iminosulfinomethyl)-, monopotassium salt (9CI) (CA INDEX NAME)



RN 143301-46-6 HCAPLUS
CN Glycine, N-(iminosulfinomethyl)-, calcium salt (2:1) (9CI) (CA INDEX NAME)



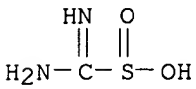
L21 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:408669 HCAPLUS
DOCUMENT NUMBER: 115:8669
TITLE: Synthesis of imidazoles
AUTHOR(S): Zav'yalov, S. I.; Ezhova, G. I.; Sitkareva, I. V.

CORPORATE SOURCE: Inst. Org. Khim. im. Zelinskogo, Moscow, USSR
SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1991), (2), 511-13
CODEN: IASKA6; ISSN: 0002-3353
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 115:8669

AB The Bredereck reaction of MeCOCHBrR I (R = Bu, pentyl) with H2NCHO in the presence of silica gel gives good yields of imidazoles II (R1 = Me). Also, azlactone III gives II (R = pentyl; R1 = H) in the same conditions, presumably through the cyclization of PhCONHCH2CO(CH2)4Me intermediate. A similar reaction of I with H2NC(:NH)SO2K gives only products of reductive debromination. Selective bromination of MeCOCH2R in EtOAc was also studied.

IT **134279-73-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(attempted cyclocondensation of, with bromo ketones)

RN 134279-73-5 HCAPLUS
CN Methanesulfinic acid, aminoimino-, monopotassium salt (9CI) (CA INDEX NAME)



L21 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1987:423288 HCAPLUS
DOCUMENT NUMBER: 107:23288
TITLE: Zwitterionic analogs of cimetidine as H2 receptor antagonists
AUTHOR(S): Young, Rodney C.; Ganellin, C. Robin; Graham, Michael J.; Mitchell, Robert C.; Roantree, Michael L.; Tashma, Zev
CORPORATE SOURCE: Smith Kline and French Res. Ltd., Welwyn/Hertfordshire, UK
SOURCE: Journal of Medicinal Chemistry (1987), 30(7), 1150-6
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 107:23288

AB Analogs of the H2 receptor histamine antagonist cimetidine, e.g. I, were synthesized in which the dipolar cyanoguanidine group has been replaced by zwitterionic moieties. Although none of the compds. is more effective than cimetidine in blocking histamine-stimulated tachycardia on the isolated guinea pig atrium, the activities of most of the compds. possessing rigid dipoles can be accounted for on the basis of dipole orientation relative to the common side chain and by considering the active species in each case to be the zwitterion. These findings are in general agreement with those found for analogs having conjugated groups as dipoles. PKa values were calcd. or measured potentiometrically for the

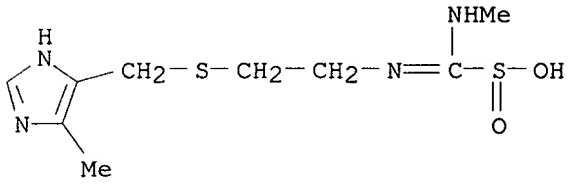
cimetidine analog antagonists.

IT **108082-64-0P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., basicity, and hydrogen receptor antagonist activity of, dipole orientation in relation to)

RN 108082-64-0 HCAPLUS

CN Methanesulfinic acid, (methylamino)[[2-[[(5-methyl-1H-imidazol-4-yl)methyl]thio]ethyl]imino]- (9CI) (CA INDEX NAME)



L21 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1985:95357 HCAPLUS

DOCUMENT NUMBER: 102:95357

TITLE: Novel desulfurization of thiourea derivatives by alkaline autoxidation

AUTHOR(S): Kim, Yong Hae; Kim, Hyung Jin; Yon, Gyu Hwan

CORPORATE SOURCE: Dep. Chem., Korea Adv. Inst. Sci. Technol., Seoul, S. Korea

SOURCE: Journal of the Chemical Society, Chemical Communications (1984), (16), 1064-5
CODEN: JCCCAT; ISSN: 0022-4936

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 102:95357

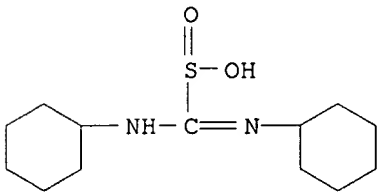
AB Autoxidn. of thioureas in the presence of O and Me3CO- in Me3COH gave the corresponding ureas in high yield together with small amts. of the corresponding guanidines, whereas similar treatment of benz- or naphthimidazole-2-thiones gave the parent imidazoles and the 2-sulfonic acids. E.g., autoxidn. of (PhNH)2CS at 40.degree. for 18 h gave 74% (PhNH)2CO and 4% (PhNH)2C:NPh.

IT **55152-75-5**

RL: RCT (Reactant); RACT (Reactant or reagent)
(autoxidative desulfurization of, urea by)

RN 55152-75-5 HCAPLUS

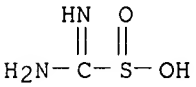
CN Methanesulfinic acid, (cyclohexylamino)(cyclohexylimino)- (9CI) (CA INDEX NAME)



L21 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1983:584904 HCAPLUS
DOCUMENT NUMBER: 99:184904
TITLE: Participation of pyridine in photooxidative processes sensitized by dyes
AUTHOR(S): Byteva, I. M.; Sarzhevskaya, M. V.; Stopolyanskaya, L. V.
CORPORATE SOURCE: Inst. Fiz., Minsk, USSR
SOURCE: Zhurnal Fizicheskoi Khimii (1983), 57(9), 2338-9
CODEN: ZFKHA9; ISSN: 0044-4537
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB A mechanism of a dye sensitized photoreaction of pyridine with O involved formation of singlet O, which oxidized pyridine to pyridine-N-oxide with yield of 2-4%. During photosensitized oxidn. of thiourea in pyridine soln. formation of a solid product was obsd.
IT **87719-30-0P**
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in photooxidn. of thiourea in pyridine)
RN 87719-30-0 HCAPLUS
CN Methanesulfinic acid, aminoimino-, compd. with pyridine (2:1) (9CI) (CA INDEX NAME)

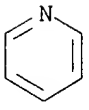
CM 1

CRN 1758-73-2
CMF C H4 N2 O2 S



CM 2

CRN 110-86-1
CMF C5 H5 N



L21 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1982:562399 HCAPLUS
DOCUMENT NUMBER: 97:162399
TITLE: N-(Imidazolylphenyl)formamidines
INVENTOR(S): Cereda, Enzo; Donetti, Arturo; Del Soldato, Piero; Bergamaschi, Mario
PATENT ASSIGNEE(S): Istituto De Angeli S.p.A., Italy
SOURCE: Eur. Pat. Appl., 47 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 53407	A2	19820609	EP 1981-201192	19811028
EP 53407	A3	19830727		
EP 53407	B1	19861230		
R: AT, BE, CH, DE, FR, IT, LU, NL, SE				
CS 249115	B2	19870312	CS 1981-7691	19811020
CS 249544	B2	19870312	CS 1985-4409	19811020
AT 24495	E	19870115	AT 1981-201192	19811028
SU 1110381	A3	19840823	SU 1981-3352653	19811117
DD 201893	A5	19830817	DD 1981-234955	19811118
US 4386099	A	19830531	US 1981-322903	19811119
DK 8105255	A	19820529	DK 1981-5255	19811126
DK 157862	B	19900226		
DK 157862	C	19900806		
FI 8103794	A	19820529	FI 1981-3794	19811126
FI 73209	B	19870529		
FI 73209	C	19870910		
IL 64388	A1	19850430	IL 1981-64388	19811126
NO 8104065	A	19820601	NO 1981-4065	19811127
NO 158183	B	19880418		
NO 158183	C	19880727		
AU 8177947	A1	19820603	AU 1981-77947	19811127
AU 554592	B2	19860828		
GB 2088375	A	19820609	GB 1981-35901	19811127
GB 2088375	B2	19850109		
JP 57120575	A2	19820727	JP 1981-190458	19811127
JP 02033031	B4	19900725		
ES 507501	A1	19820901	ES 1981-507501	19811127
ES 507505	A1	19820901	ES 1981-507505	19811127
ES 507506	A1	19820901	ES 1981-507506	19811127
ES 507507	A1	19820901	ES 1981-507507	19811127
ES 507508	A1	19820901	ES 1981-507508	19811127
ES 507509	A1	19820901	ES 1981-507509	19811127
ZA 8108240	A	19830727	ZA 1981-8240	19811127
HU 29076	O	19840130	HU 1981-3571	19811127
HU 187478	B	19860128		
CA 1171092	A1	19840717	CA 1981-391057	19811127
PL 135749	B1	19851231	PL 1981-234007	19811127
PL 136015	B1	19860131	PL 1981-238422	19811127
SU 1110382	A3	19840823	SU 1982-3463046	19820712
US 4465841	A	19840814	US 1982-427884	19820929
CA 1181080	A2	19850115	CA 1984-448583	19840229
NO 8704353	A	19820601	NO 1987-4353	19871019
NO 160578	B	19890123		
NO 160578	C	19890503		

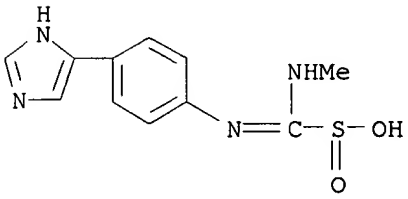
PRIORITY APPLN. INFO.:

IT 1980-26323	19801128
EP 1981-201192	19811028
US 1981-322903	19811119
CA 1981-391057	19811127
NO 1981-4065	19811127

AB Amidines I [R, R1, and R2 (same or different) are H, alkyl; R3 = alkyl,

alkenyl, alkynyl, cyano, OH, cycloalkyl, bicycloalkyl, aralkyl, aryl, heteroaryl] were prepd. and they showed antihistaminic activity (to inhibit gastric acid secretion). Thus, HCONHMe reacted with 4-(4-aminophenyl)-1H-imidazole and PhCOCl to give the resp. I (R3 = Me, R = R1 = R2 = H).

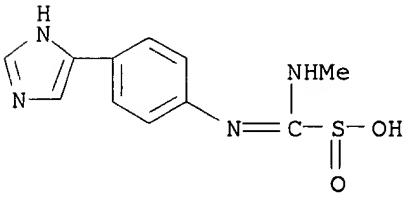
IT **83184-86-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and desulfination of)
RN 83184-86-5 HCAPLUS
CN Methanesulfinic acid, [[4-(1H-imidazol-4-yl)phenyl]amino](methylimino)-(9CI) (CA INDEX NAME)



IT **83184-87-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 83184-87-6 HCAPLUS
CN Methanesulfinic acid, [[4-(1H-imidazol-4-yl)phenyl]amino](methylimino)-, acetate (9CI) (CA INDEX NAME)

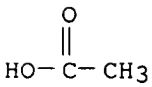
CM 1

CRN 83184-86-5
CMF C11 H12 N4 O2 S



CM 2

CRN 64-19-7
CMF C2 H4 O2



L21 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1977:601502 HCAPLUS
DOCUMENT NUMBER: 87:201502
TITLE: Amidinoformic and -sulfinic acid derivatives, and their hydrates and salts
INVENTOR(S): Durant, Graham John; Ganellin, Charon Robin; Young, Rodney Christopher
PATENT ASSIGNEE(S): Smith Kline and French Laboratories Ltd., UK
SOURCE: Ger. Offen., 24 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2710326	A1	19770915	DE 1977-2710326	19770309
GB 1574214	A	19800903	GB 1976-9750	19760311
IN 147036	A	19791027	IN 1977-CA249	19770219
ZA 7701018	A	19780125	ZA 1977-1018	19770221
IL 51530	A1	19810331	IL 1977-51530	19770224
US 4118502	A	19781003	US 1977-773590	19770302
DK 7700964	A	19770912	DK 1977-964	19770304
CA 1075700	A1	19800415	CA 1977-273246	19770304
FR 2343730	A1	19771007	FR 1977-6594	19770307
FR 2343730	B1	19800111		
FI 7700736	A	19770912	FI 1977-736	19770308
AT 7701541	A	19800215	AT 1977-1541	19770308
AT 358576	B	19800925		
NL 7702533	A	19770913	NL 1977-2533	19770309
DD 128616	C	19771130	DD 1977-197753	19770309
RO 73006	P	19820412	RO 1977-89634	19770309
BE 852324	A1	19770912	BE 1977-175676	19770310
NO 7700854	A	19770913	NO 1977-854	19770310
JP 52136170	A2	19771114	JP 1977-26883	19770310
AU 7723155	A1	19780914	AU 1977-23155	19770310
PL 105620	P	19791031	PL 1977-196568	19770310
CS 196352	P	19800331	CS 1977-1613	19770310
HU 18832	O	19800927	HU 1977-SI1563	19770310
HU 176611	P	19810328		
SE 7702771	A	19770914	SE 1977-2771	19770311
SU 814274	A3	19810315	SU 1977-2460625	19770311
US 4189488	A	19800219	US 1978-914329	19780612
CS 196353	P	19800331	CS 1978-7899	19781130
SU 731896	D	19800430	SU 1979-2705004	19790105
CA 1075703	A2	19800415	CA 1979-320456	19790130
US 4308275	A	19811229	US 1979-65478	19790810
DK 7905261	A	19791211	DK 1979-5261	19791211
US 4395419	A	19830726	US 1981-291196	19810810
US 4438127	A	19840320	US 1983-472434	19830307

PRIORITY APPLN. INFO.:

GB 1976-9750	19760311
US 1977-773590	19770302
CA 1977-273246	19770304
DK 1977-964	19770304
CS 1977-1613	19770310

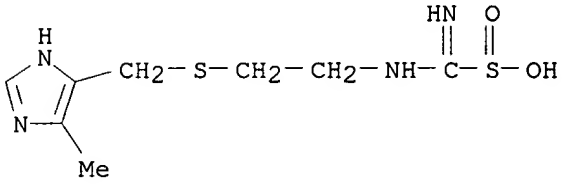
US 1978-914329 19780612
US 1979-65478 19790810
US 1981-291196 19810810

AB RCH2SCH2CH2NHCR1:NHR2 (I; R = 5-methyl-4-imidazolyl, 2-thiazolyl; R1 = CO2H, SO2H; R2 = H, Me, RCH2SCH2CH2) were prepd. for use as antihistamines. Thus, a mixt. of H2NC(S)CO2H, 2-(5-methyl-4-imidazolylmethylthio)ethylamine, Pb3O4, and MeOH was stirred at room temp. 4 h to give I (R = 5-methyl-4-imidazolyl, R1 = CO2H, R2 = Me). I are useful as histamine H2 antagonists, as shown by tests on rats.

IT **64998-02-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 64998-02-3 HCAPLUS

CN Methanesulfinic acid, imino[[2-[[(5-methyl-1H-imidazol-4-yl)methyl]thio]ethyl]amino]- (9CI) (CA INDEX NAME)



L21 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1975:155197 HCAPLUS

DOCUMENT NUMBER: 82:155197

TITLE: Synthesis of formamidinesulfinic acids and formamidines

AUTHOR(S): Havel, James J.; Kluttz, Robert Q.

CORPORATE SOURCE: Dep. Chem., Rice Univ., Houston, TX, USA

SOURCE: Synthetic Communications (1974), 4(6), 389-93
CODEN: SYNCAV; ISSN: 0039-7911

DOCUMENT TYPE: Journal

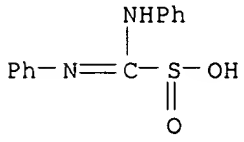
LANGUAGE: English

AB Oxidn. of RNHCSNHR (R = H, Me, Et, Bu, Ph, cyclohexyl, PhCH2) at 5-10.degree. gave 80-90% RNHC(SO2-):N+HR, which when refluxed in HOAc gave 50-95% RNHCH:N+HR OAc-.

IT **14451-44-6P 55152-72-2P 55152-73-3P**
55152-74-4P 55152-75-5P 55152-76-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and pyrolysis of)

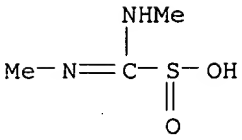
RN 14451-44-6 HCAPLUS

CN Methanesulfinic acid, (phenylamino)(phenylimino)- (9CI) (CA INDEX NAME)

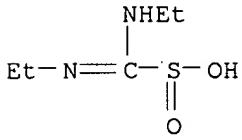


RN 55152-72-2 HCAPLUS

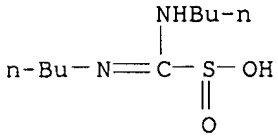
CN Methanesulfinic acid, (methylamino)(methylimino)- (9CI) (CA INDEX NAME)



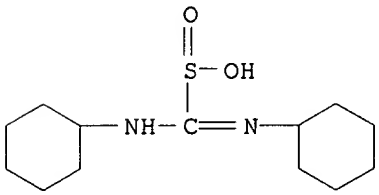
RN 55152-73-3 HCAPLUS
CN Methanesulfinic acid, (ethylamino)(ethylimino)- (9CI) (CA INDEX NAME)



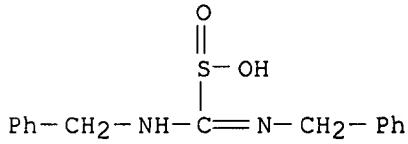
RN 55152-74-4 HCAPLUS
CN Methanesulfinic acid, (butylamino)(butylimino)- (6CI, 9CI) (CA INDEX NAME)



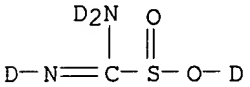
RN 55152-75-5 HCAPLUS
CN Methanesulfinic acid, (cyclohexylamino)(cyclohexylimino)- (9CI) (CA INDEX NAME)



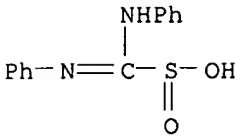
RN 55152-76-6 HCAPLUS
CN Methanesulfinic acid, [(phenylmethyl)amino][(phenylmethyl)imino]- (9CI) (CA INDEX NAME)



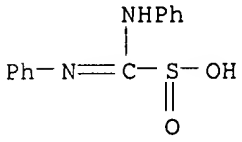
L21 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1974:133103 HCAPLUS
DOCUMENT NUMBER: 80:133103
TITLE: Preparation of 1-deuterated secondary alcohols
AUTHOR(S): Shanker, Rama
CORPORATE SOURCE: Dep. Chem., Univ. Glasgow, Glasgow, UK
SOURCE: Chemistry & Industry (London, United Kingdom) (1974), (2), 76
CODEN: CHINAG; ISSN: 0009-3068
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Refluxing 9-fluorenone in EtOD-NaOD-D2O with D2NC(:ND)SO2D gave 9-fluorenol contg. 90% D at C-9.
IT **2914-31-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(redn. of ketones by, deuterated secondary alcs. by)
RN 2914-31-0 HCAPLUS
CN Methanesulfinic acid-d, amino-d2-imino-d- (7CI, 8CI, 9CI) (CA INDEX NAME)



L21 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1972:513325 HCAPLUS
DOCUMENT NUMBER: 77:113325
TITLE: Spectrochemical study of aminoiminomethanesulfinic acid and related N,N'-derivatives
AUTHOR(S): De Filippo, D.; Ponticelli, G.; Trogu, E. F.; Lai, A.
CORPORATE SOURCE: Ist. Chim. Policattedra, Univ. Cagliari, Cagliari, Italy
SOURCE: Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1972-1999) (1972), (11), 1500-2
CODEN: JCPKBH; ISSN: 0300-9580
DOCUMENT TYPE: Journal
LANGUAGE: English
AB H2NC(:NH)SO2H, PhNHC(:NPh)SO2H, p-MeC6H4NHC(:NH)SO2H, and o-MeC6H4NHC(:N-C6H4Me-o)SO2H (I) were prepd. by oxidn. at 0-6.degree. of the corresponding thiourea in dioxane with 33% H2O2 using Na4MoO5 as catalyst. Strong H bonds were obsd. by ir spectroscopy; force consts., bond orders, and OSO angles were detd. Assignment of all PMR resonances allowed full characterization; a conformational study of I and its Na salt in CF3CO2D-CDCl3 was accomplished.
IT **14451-44-6P 38716-57-3P 38716-58-4P**
38716-59-5P 38716-60-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and spectra of)
RN 14451-44-6 HCAPLUS
CN Methanesulfinic acid, (phenylamino)(phenylimino)- (9CI) (CA INDEX NAME)

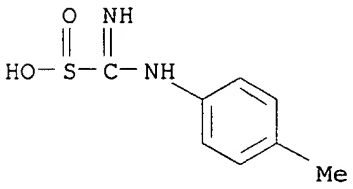


RN 38716-57-3 HCAPLUS
CN Methanesulfinic acid, (phenylamino)(phenylimino)-, monosodium salt (9CI) (CA INDEX NAME)

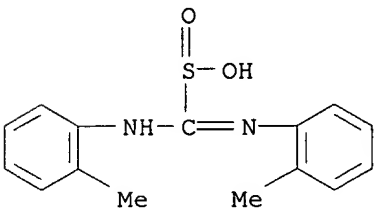


● Na

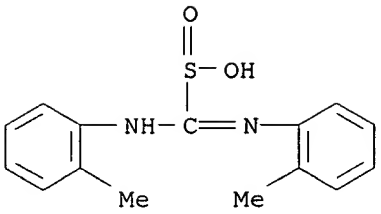
RN 38716-58-4 HCAPLUS
CN Methanesulfinic acid, imino[(4-methylphenyl)amino]- (9CI) (CA INDEX NAME)



RN 38716-59-5 HCAPLUS
CN Methanesulfinic acid, [(2-methylphenyl)amino][(2-methylphenyl)imino]- (9CI) (CA INDEX NAME)

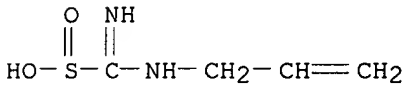


RN 38716-60-8 HCAPLUS
CN Methanesulfinic acid, [(2-methylphenyl)amino][(2-methylphenyl)imino]-, monosodium salt (9CI) (CA INDEX NAME)



● Na

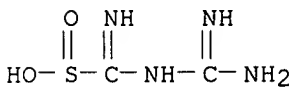
L21 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1972:73935 HCAPLUS
DOCUMENT NUMBER: 76:73935
TITLE: Photosensitized oxidation of allylthiourea in rigid macromolecular media
AUTHOR(S): Dubosc, Jean P.; Mercier, Claude; Bourdon, Jean
CORPORATE SOURCE: Lab. Rech., Kodak-Pathe, Vincennes, Fr.
SOURCE: Bulletin de la Societe Chimique de France (1971), (9), 3286-90
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: French
AB An O-permeable Et cellulose [9004-57-3] film is used as a medium for allylthiourea [109-57-9] oxidn. in the presence of erythrosine or eosine. Singlet O participates in the oxidn. which gives the products obtained previously by oxidn. in soln., i.e., (allylamino)(imino)methanesulfinic acid, allylcyanamide, and H2SO4.
IT **36333-00-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 36333-00-3 HCAPLUS
CN Methanesulfinic acid, imino(2-propenylamino)- (9CI) (CA INDEX NAME)



L21 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1972:24628 HCAPLUS
DOCUMENT NUMBER: 76:24628
TITLE: N-Guanylformamidinesulfinic acid
AUTHOR(S): Kondrashova, M. F.; Yarovenko, E. Ya.
CORPORATE SOURCE: USSR
SOURCE: Metody Poluch. Khim. Reaktivov Prep. (1969), No. 20, 56-7
From: Ref. Zh., Khim. 1971, Abstr. No. 1Zh211
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Oxidn. of NH2C(:NH)NHC(S)NH2.(COOH)2 (I) with H2O2 at 60.degree. at pH 2-3

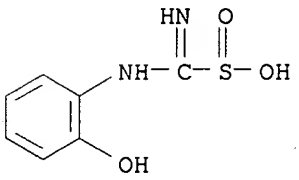
gave 51% NH2C(:NH)N:C(SO2H)NH2.H2O.

IT **34619-81-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 34619-81-3 HCAPLUS
CN Methanesulfinic acid, [(aminoiminomethyl)amino]imino- (9CI) (CA INDEX NAME)



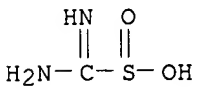
L21 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1972:14053 HCAPLUS
DOCUMENT NUMBER: 76:14053
TITLE: N-o-Hydroxyphenylformamidinesulfinic acid
AUTHOR(S): Yarovenko, E. Ya.; Lastovskii, R. P.
CORPORATE SOURCE: USSR
SOURCE: Metody Poluch. Khim. Reaktiv. Prp. (1969), No. 20, 162-3
From: Ref. Zh., Khim. 1971, Abstr. No. 1Zh294
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB H2O2 (0.704 mole) was added to a suspension of 0.01 mole N-.omicron.-hydroxyphenylthiourea, 0.002 g (NH4)2MoO4 and 20 ml H2O2 at 5.degree., held at this temp. 30 min to ppt. 60% .omicron.-HOC6H4NHC(:NH)SO2H.

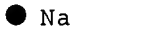
IT **27395-36-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 27395-36-4 HCAPLUS
CN Methanesulfinic acid, [(2-hydroxyphenyl)amino]imino- (9CI) (CA INDEX NAME)



L21 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1971:127320 HCAPLUS
DOCUMENT NUMBER: 74:127320
TITLE: Effect of formaldehyde in single-bath suspension fabric dyeing
AUTHOR(S): Shmukler, Yu. S.; Prorokov, N. I.; Mel'nikov, B. N.; Moryganov, P. V.; Gruzdeva, A. N.
CORPORATE SOURCE: Ivanov. Khim.-Tekhnol. Inst., Ivanovo, USSR
SOURCE: Tekstil'naya Promyshlennost (Moscow, Russian Federation) (1971), 31(2), 50-2

CODEN: TTLPA2; ISSN: 0040-2397
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The addn. of HCHO to the dispersions of vat dyes, such as Golden Yellow.ZhKhD, contg. H2NC(:NH)SO2Na (I), decreases the redn. potential of these dispersions and prevents the premature redn. of dyes by virtue of H2NC(:NH)SO2CH2ONa (II) formation. The reducing potential of II at room temp. is lower than that of I. The redn. takes place predominantly during steaming when II is decompd. to urea, HCHO, NaHSO3 and H.
IT **32221-00-4**
RL: USES (Uses)
(textile single-bath suspension dyeing in presence of, contg. formaldehyde)
RN 32221-00-4 HCAPLUS
CN Methanesulfinic acid, aminoimino-, monosodium salt (8CI, 9CI) (CA INDEX NAME)

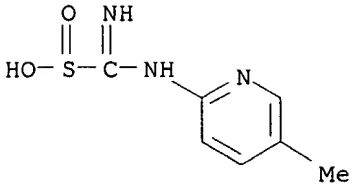




L21 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1969:87599 HCAPLUS
DOCUMENT NUMBER: 70:87599
TITLE: N-Pyridyl- or N-quinolylformamidinesulfinic acids
INVENTOR(S): Shibanov, G. N.; Zhigaleva, T. M.
PATENT ASSIGNEE(S): North-Caucasus Scientific-Research Institute of Phytopathology
SOURCE: U.S.S.R. From: Izobret., Prom. Obraztsy, Tovarnye Znaki 1968, 45(33), 41.
CODEN: URXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

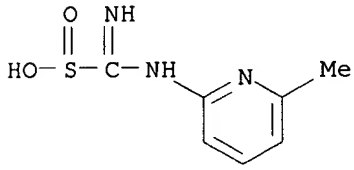
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 229521		19681023	SU	19670708

AB Title compds. are prepd. by treating N-pyridyl(or N-quinolyl)thiourea with H2O2 in the presence of Na molybdate as a catalyst at 0-5.degree. in an aq. medium.
IT **22462-65-3P 22462-66-4P 22462-67-5P**
22462-68-6P 22462-88-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 22462-65-3 HCAPLUS
CN Methanesulfinic acid, imino[(5-methyl-2-pyridyl)amino]-, monoammonium salt (8CI) (CA INDEX NAME)



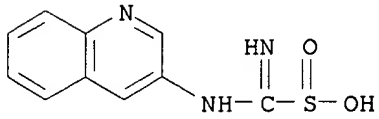
● NH_3

RN 22462-66-4 HCAPLUS
CN Methanesulfinic acid, imino[(6-methyl-2-pyridyl)amino]-, monoammonium salt (8CI) (CA INDEX NAME)



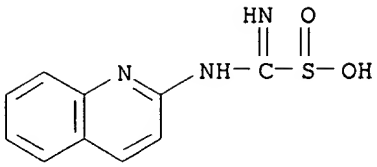
● NH_3

RN 22462-67-5 HCAPLUS
CN Methanesulfinic acid, imino(3-quinolylamino)-, monoammonium salt (8CI) (CA INDEX NAME)



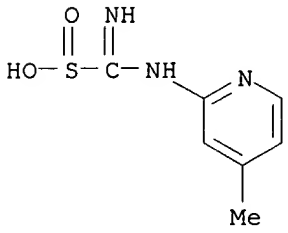
● NH_3

RN 22462-68-6 HCAPLUS
CN Methanesulfinic acid, imino(2-quinolylamino)-, monoammonium salt (8CI) (CA INDEX NAME)



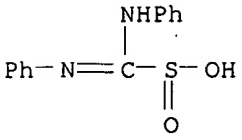
● NH_3

RN 22462-88-0 HCAPLUS
CN Methanesulfinic acid, imino[(4-methyl-2-pyridyl)amino]-, monoammonium salt (8CI) (CA INDEX NAME)

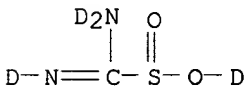


● NH_3

L21 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1968:49238 HCAPLUS
DOCUMENT NUMBER: 68:49238
TITLE: N,N'-Diphenylformamidinesulfinic acid dihydrate
AUTHOR(S): Globus, R. L.; Lastovskii, R. P.; Yarovenko, E. Ya.; Medvedeva, S. P.
SOURCE: Metody Polucheniya Khimicheskikh Reaktivov i Preparatov (1967), No. 15, 75-6
CODEN: MPRPAT; ISSN: 0539-5143
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB H2O2 (28.2%) (6 ml.) was added dropwise to a vigorously stirred soln. of 5 g. N,N'-diphenylthiourea and 0.025 g. Na molybdenate in 80 ml. dioxane at 15.degree.. The reaction mixt. was cooled, the ppt. filtered and dried at 60.degree. to give 61.6% PhN:C(NHPh)SO2H.2H2O, m. 183-4.degree..
IT **14451-44-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 14451-44-6 HCAPLUS
CN Methanesulfinic acid, (phenylamino)(phenylimino)- (9CI) (CA INDEX NAME)



L21 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1965:450891 HCAPLUS
DOCUMENT NUMBER: 63:50891
ORIGINAL REFERENCE NO.: 63:9240e-f
TITLE: Infrared absorption spectra and structure of thiourea dioxide
AUTHOR(S): Kharitonov, Yu. Ya.; Prokof'eva, I. V.
SOURCE: Doklady Akademii Nauk SSSR (1965), 162(4), 829-32
CODEN: DANKAS; ISSN: 0002-3264
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Thiourea dioxide, (NH2)2CSO2, was obtained by oxidn. of thiourea with H2O2; it was deuterated to (ND2)2CSO2 by exchange with D2O. The ir spectra were measured in the range 400-4000 cm.-1 by a double-beam spectrograph. The frequencies of the groups; SO2-, C:N, NH, and ND, are given. The frequencies of the vibrations of the SO2 group were practically not altered by deuteration. The bond between (NH2)2C and SO2 seems o be weak. There is 1 double bond C:N and one ordinary C-N bond. The structure I is proposed for the cryst. state of thiourea dioxide.
IT **2914-31-0**, Methanesulfinic acid-d, amino-d2-imino-d-
(spectrum and structure of)
RN 2914-31-0 HCAPLUS
CN Methanesulfinic acid-d, amino-d2-imino-d- (7CI, 8CI, 9CI) (CA INDEX NAME)



L21 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1962:476441 HCAPLUS
DOCUMENT NUMBER: 57:76441
ORIGINAL REFERENCE NO.: 57:15257d-e,15258a
TITLE: Aminoiminomethanesulfinic acid and derivatives as tumor inhibitors
INVENTOR(S): Rao, Koppaka V.
PATENT ASSIGNEE(S): Chas. Pfizer & Co., Inc.
SOURCE: 3 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3051626		19620828	US	19590701

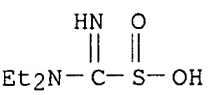
AB Aminoiminomethanesulfinic acid (I) was effective intraperitoneally and

orally for inhibition of adenocarcinoma CA-755 and sarcomas 180 and HS-1 in white mice, with acceptable survival rates and toxicities.

IT **90324-78-0**, Methanesulfinic acid, (diethylamino)imino-
93281-79-9, Methanesulfinic acid, (diethylamino)imino-, compd. with diethylamine
(as neoplasm inhibitor)

RN 90324-78-0 HCAPLUS

CN Methanesulfinic acid, (diethylamino)imino- (7CI, 9CI) (CA INDEX NAME)

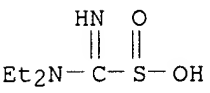


RN 93281-79-9 HCAPLUS

CN Methanesulfinic acid, (diethylamino)imino-, compd. with diethylamine (7CI) (CA INDEX NAME)

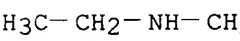
CM 1

CRN 90324-78-0
CMF C5 H12 N2 O2 S



CM 2

CRN 109-89-7
CMF C4 H11 N



L21 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1960:116319 HCAPLUS
DOCUMENT NUMBER: 54:116319
ORIGINAL REFERENCE NO.: 54:22119e-i,22120a
TITLE: Sensitizing photographic emulsions with iminoaminomethanesulfinic acids
PATENT ASSIGNEE(S): Gevaert Photo-Producten N. V.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

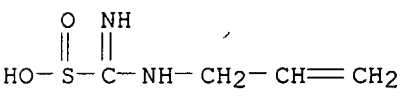
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 547323		19560816	BE	

AB The sensitivity of Ag halide emulsions with or without other sensitizers

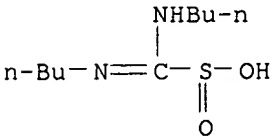
is enhanced by addn. of derivs. of NH2C(:NH)SO2H (I) or (NH2)2C:SO2, preferably in an amt. of 0.05-1% in relation to the amt. of Ag. Thus, a washed negative gelatin emulsion (A) (av. grain size 0.8 .mu.) contg. 5% AgI and 95% AgBr was ripened at 45.degree.. To 1 part (B), 20 mg. CH2:CHCH2NHC(:NH)SO2H (II) and to another part (C), 0.6 mg. I per 100 g. Ag were added at the start of the ripening. A pan sensitizer and other usual components were added. The relative sensitivity of A, B, and C was 100, 180, and 190, resp. A washed photographic emulsion (av. grain size 0.4 .mu.) contg. 36% AgCl and 64% AgBr was ripened at 45.degree.. Chrome alum, KBr, saponin, etc., were also added. At the start of the ripening, 200 mg. II was added to 1 part. The relative sensitivity was 100 and 190, resp. A washed AgBr emulsion (av. size: 0.1 .mu.) for positive cine film was ripened at 54.degree.. At the start of the ripening, 400 mg. II was added to one part and 10 mg. I to another. The relative sensitivity was 100, 210, and 200, resp. A washed, fine-grained Ag(BrI) emulsion prepd. from an inert gelatin was ripened at 50.degree. optionally in the presence of a S sensitizer until an optimum sensitivity was reached: sensitizer, another sensitizer, the relative sensitivity, and the gamma are given: none, none, 22, 0.50; 8 cc. Na2S2O3 0.1% (III), none, 100, 1.10; III, 0.02 cc. I, 160, 1.10; III, 0.2 cc. I, 240, 1.25; III, 2 cc. II, 200, 1.10; III, 6 cc. II, 250, 1.30; III, 20 cc. II, 250, 1.35; none, 0.02 cc. I, 30, 0.55; none, 0.2 cc. I, 60, 1.05; none, 2 cc. II, 50, 1.05; none, 6 cc. II, 60, 1.10; none, 20 cc. II, 65, 1.20; none, 12 cc. 2-ClC6H4NHC(:NH)SO2H, 40, 0.70; none, 12 cc. (morpholino)(imino)methanesulfinic acid, 65, 1.20; none, 1.2 cc. MeNHC(:NH)SO2H, 60, 1.05; none, 12 cc. C3H7NHC(:NH)SO2H, 65, 1.15; none, 12 cc. CH2:CHCH2NHC(:NCH2CH:CH2)SO2H, 65, 1.20; none, 12 cc. BuNHC(:NBu)SO2H, 65, 1.20; none, 12 cc. (2-pyridylamino)(methylimino)methanesulfinic acid, 60, 1.10; none, 12 cc. CH2[CH2CH2NHC(:NH)SO2H]2, 65, 1.15.

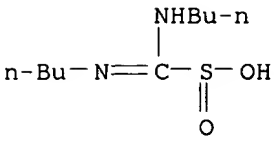
IT **36333-00-3**, Methanesulfinic acid, (allylamino)imino-
55152-74-4, Methanesulfinic acid, (butylamino)(butylimino)-
98026-08-5, Methanesulfinic acid, imino(propylamino)-
98337-00-9, Methanesulfinic acid, (allylamino)(allylimino)-
98548-10-8, Methanesulfinic acid, (methylimino)(2-pyridylamino)-
108249-21-4, Methanesulfinic acid, imino(methylamino)-
118835-32-8, Methanesulfinic acid, (pentamethylenediimino)bis[imino-
(for sensitizing photographic emulsions)

RN 36333-00-3 HCAPLUS
CN Methanesulfinic acid, imino(2-propenylamino)- (9CI) (CA INDEX NAME)

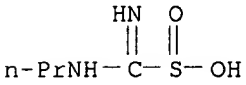


RN 55152-74-4 HCAPLUS
CN Methanesulfinic acid, (butylamino)(butylimino)- (6CI, 9CI) (CA INDEX NAME)

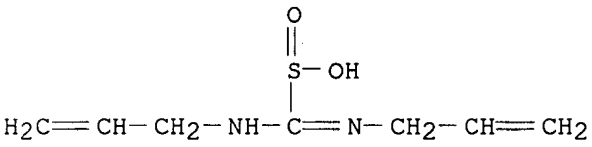




RN 98026-08-5 HCAPLUS
CN Methanesulfinic acid, imino(propylamino)- (6CI, 9CI) (CA INDEX NAME)



RN 98337-00-9 HCAPLUS
CN Methanesulfinic acid, (allylamino)(allylimino)- (6CI) (CA INDEX NAME)



RN 98548-10-8 HCAPLUS
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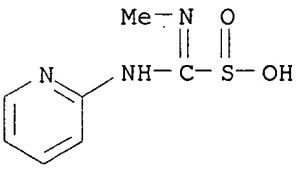
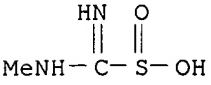
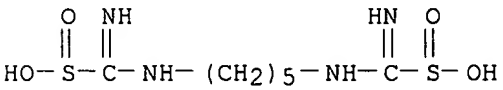
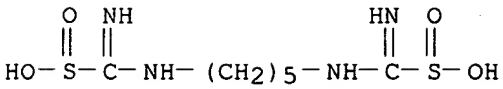


RN 108249-21-4 HCAPLUS
CN Methanesulfinic acid, imino(methylamino)- (6CI, 9CI) (CA INDEX NAME)



RN 118835-32-8 HCAPLUS
CN Methanesulfinic acid, (pentamethylenediimino)bis[imino- (6CI) (CA INDEX NAME)





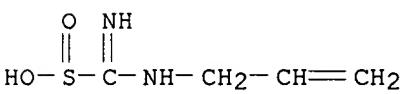
L21 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1960:90545 HCAPLUS
DOCUMENT NUMBER: 54:90545
ORIGINAL REFERENCE NO.: 54:17128d-e
TITLE: Photographic emulsions with increased light sensitivity
INVENTOR(S): Roosens, Laurent P.; Faelens, Paul A.
PATENT ASSIGNEE(S): Gevaert Photo-Producten N.V.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1020864		19571212	DE	

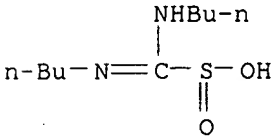
AB The sensitivity of Ag halide emulsions sensitized with S sensitizers and Au, Pt, or Pd compds. can be increased by addn. of (imino)(amino)methanesulfinic acid compds. (I). From thiourea or its N-substituted derivs. and H2O2 and (or) NaMnO4, I are easily obtained. Addn. to the emulsion takes place at any time during the emulsion production in quantities from 0.05 to 1% of the Ag amt.

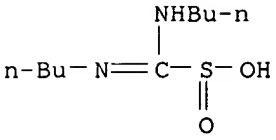
IT **36333-00-3**, Methanesulfinic acid, (allylamino)imino- **55152-74-4**, Methanesulfinic acid, (butylamino)(butylimino)- **98026-08-5**, Methanesulfinic acid, imino(propylamino)- **98337-00-9**, Methanesulfinic acid, (allylamino)(allylimino)- **98337-86-1**, Methanesulfinic acid, (methylimino)[(3,4,5,6-tetrahydro-2-pyridyl)amino]- **98550-72-2**, Methanesulfinic acid, (o-chloroanilino)imino- **108249-21-4**, Methanesulfinic acid, imino(methylamino)- **118835-32-8**, Methanesulfinic acid, (pentamethylenediimino)bis[imino-
(for sensitizing photographic emulsions)

RN 36333-00-3 HCAPLUS
CN Methanesulfinic acid, imino(2-propenylamino)- (9CI) (CA INDEX NAME)

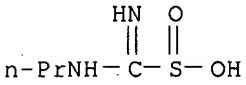


RN 55152-74-4 HCAPLUS
CN Methanesulfinic acid, (butylamino)(butylimino)- (6CI, 9CI) (CA INDEX NAME)





RN 98026-08-5 HCAPLUS
CN Methanesulfinic acid, imino(propylamino)- (6CI, 9CI) (CA INDEX NAME)



RN 98337-00-9 HCAPLUS
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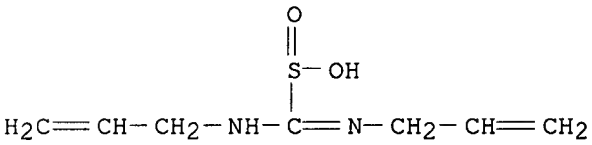

RN 98337-86-1 HCAPLUS
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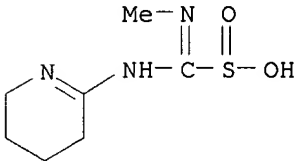
(9CI) (CA INDEX NAME)



RN 98550-72-2 HCAPLUS
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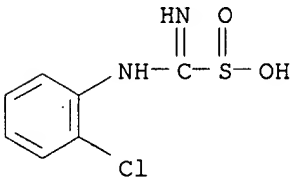
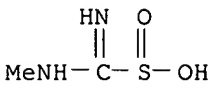
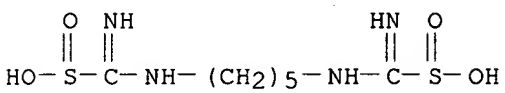


RN 108249-21-4 HCAPLUS
CN Methanesulfinic acid, imino(methylamino)- (6CI, 9CI) (CA INDEX NAME)



RN 118835-32-8 HCAPLUS
CN Methanesulfinic acid, (pentamethylenediimino)bis[imino- (6CI) (CA INDEX NAME)



L21 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1951:3726 HCAPLUS
DOCUMENT NUMBER: 45:3726
ORIGINAL REFERENCE NO.: 45:659b-i,660a
TITLE: Stabilized organic compounds
INVENTOR(S): Tillitson, Edward W.
PATENT ASSIGNEE(S): Parke, Davis & Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2493471		19500103	US	

AB Sulfinic acids, employed in the stabilization of sympathomimetic drugs and compds. contg. the same, were prepd. by the oxidation of the corresponding thioureas with a peroxide type of compd., such as H2O2. Epinephrine, l-3,4-(HO)2C6H3CH(OH)CH2NHMe (I) (1.1. g.) in 5.2 ml. 4.2% HCl added to 0.1 g. H2NC(:NH)SO2H (II), 0.02 g. (p-tert-octylphenoxyethoxyethyl)dimethy lbenzylammonium chloride monohydrate (III) (a germicide), 0.05 g. citric acid, and 0.48 g. NaCl in 50 ml. distd. H2O, and the soln. dild. to 100 cc. and sterilized by filtration through a Mandler filter, gave a pH of 2.81. A control with the same quantities of reagents except that 0.1 g. NaHSO3 was substituted for the 0.1 g. II gave a pH of 2.75. At the end of 2 yrs. the control was light yellow, had a pH of 2.55, and contained 80% of the original I activity. The soln. contg. II had a pH of 4.25, was colorless, and contained 100% of the original I activity; when placed in a nebulizer and aerated every 15 min. for 5 hrs. and allowed to stand overnight, it showed no appreciable change in color or activity. A soln. similarly prepd. from 0.11 g. I, 0.7 ml. 4.2% HCl, 0.1 g. II, 0.02 g. III, 0.05 g. citric acid, 0.80 g. NaCl, and distd. H2O to 100 ml. had a pH of 2.53, and a control (with 0.1 g. NaHSO3 substituted for II) gave a pH of 2.81. After aging for 2 yrs. the pH's of the control and the II solns. were 2.60 and 4.15, resp. When aerated as in the above example the II soln. was unchanged. The 2 solns. (control and II) contained 80 and 100% of the original I activity, resp. I (1.1 g.), 5.2 ml. 4.2% HCl, 0.1 g. II, 0.5 g. Me2C(OH)CCl3 (IV) (a germicide), sufficient dextrose to make the prepn. isotonic, 0.5 g. citric acid, and H2O to 100 ml. gave a pH of 2.88; a control with NaHSO3 instead of II gave a pH of 2.67. After aging for 2 yrs. the control and the II solns. had pH's of 2.61 and 4.48, and

contained 75 and 100%, resp. of the original I activity. I. (1.1 g.), 5.2 ml. 4.2% HCl, 0.1 g. II, about 0.5 g. NaCl, 0.5 g. IV, and H2O to 100 ml. gave a pH of 2.90, the control 2.65; after aging for 2 yrs., the solns. had pH's of 2.94 and 2.38 and contained 100 and 75%, resp., of the original I activity. I (0.11 g.), 0.7 ml. 4.2% HCl, 0.5 g. IV, 0.1 g. II, about 0.9 g. NaCl, and H2O to 100 ml. gave a pH of 2.63, the control 2.70. After aging for 2 yrs. the 2 solns. had pH's of 3.68 and 2.57 and contained 100 and 80%, resp., of the original I activity. A soln. of 0.11 g. I, 0.7 ml. 4.2% HCl, 0.05 g. citric acid, 0.02 g. III, about 1.5 g. dextrose, 0.1 g. II, and H2O 100 ml. and a control stabilized with 0.1 g. NaHSO3 (pH 2.70), when aerated and aged for 2 yrs. had pH's of 4.2 and 2.45 and contained 100 and 90% of the original I activity. dl - p - HOC6H4CH(OH)CH2NHMe (1.0 g.), 5 ml. of 4.5% HCl, 0.05 g. II, about 0.5 g. NaCl, 0.02 g. III, and distd. H2O to 100 ml., and a control with NaHSO3 instead of II, were aged for 2 yrs.; the control soln. contained less sympathomimetic activity per ml. than the original soln., while the II soln. remained unaffected. dl-3,4-(HO)2C6H3CH(OH)CH(NH2)Me (1.0g.), 5 ml. 4.2% HCl, 0.1 g. BuNH(C:NH)SO2H, about 0.5 g. NaCl, 0.5 g. IV, and H2O to 100 ml. gave a soln. stable in color and sympathomimetic activity. dl-p-HOC6H4CH(OH)CH(NHMe)Me (1 g.), 4 ml. 5% HCl, 0.1 g. PrNHC(:NH)SO2H (V), 0.6 g. NaCl, and H2O to 100 ml. formed a soln. stable in physiol. activity after several yrs. dl-3,4-(HO)2C6H3CH(OH)CH2NH2 (1 g.), 5 ml. 4.2% HCl, 1 g. II, 0.5 g. NaCl, and 95 ml. distd. H2O formed a soln. which after sterilization and 2 yrs.' aging, was stable in sympathomimetic activity. V was prepd. by dissolving 44 g. PrNHCSNH2 in 200 ml. dioxane and 5 ml. H2O, cooling to 6.degree., adding solid CO2 and 25.4 g. (87.5 cc. of a 29% soln.) of H2O2 dropwise with stirring and keeping the temp. below 10.degree., stirring an addnl. 2 hrs., and concg. the mixt. in vacuo to yield yellow needles of V, m. 110-12.degree. after washing with abs. alc. (Butylamino)iminomethanesulfinic acid, BuNHC(:NH)SO2H (VI) was obtained by treating 50 g. BuNHCSNH2 with 20 ml. H2O and 100 ml. dioxane, warming, cooling to 0.degree., adding 89 cc. 29% H2O2 soln. dropwise with stirring, and stirring for 2 hrs. to obtain VI, m. 126.degree., after filtration and crystn. from H2O. These compds. are used in solns. of sympathomimetic drugs.

IT **98026-08-5**, Methanesulfinic acid, imino(propylamino)-
(prepn. of)

RN 98026-08-5 HCAPLUS

CN Methanesulfinic acid, imino(propylamino)- (6CI, 9CI) (CA INDEX NAME)